

10/074884

ABSTRACT OF THE DISCLOSURE

5 A semiconductor topography is provided which includes a silicon dioxide layer  
with a thickness equal to or less than approximately 10 angstroms and a silicon nitride  
layer arranged upon the silicon dioxide layer. In addition, a method is provided which  
includes growing an oxide film upon a semiconductor topography in the presence of an  
ozonated substance and depositing a silicon nitride film upon the oxide film. In some  
embodiments, the method may include growing the oxide film in a first chamber at a first  
temperature and transferring the semiconductor topography from the first chamber to a  
10 second chamber while the semiconductor topography is exposed to a substantially similar  
temperature as the first temperature. In either embodiment, the method may be used to  
form a semiconductor device including an oxide-nitride gate dielectric having an  
electrical equivalent oxide gate dielectric thickness of less than approximately 20  
angstroms.

15

10074884-021302